

A Comparison of Measures of State Higher Education Funding

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Higher education finance can be a thorny topic to analyze as publicly accessible datasets have noteworthy differences and the measures used in traditional analyses can often lead to conclusions that are far from evenhanded. This paper was developed to help researchers and policy analysts better understand the differences among popular datasets and the effect various metrics have on the story of higher education finance. Recommendations for the use of the datasets and common measures discussed herein will be presented in the paper's concluding section.

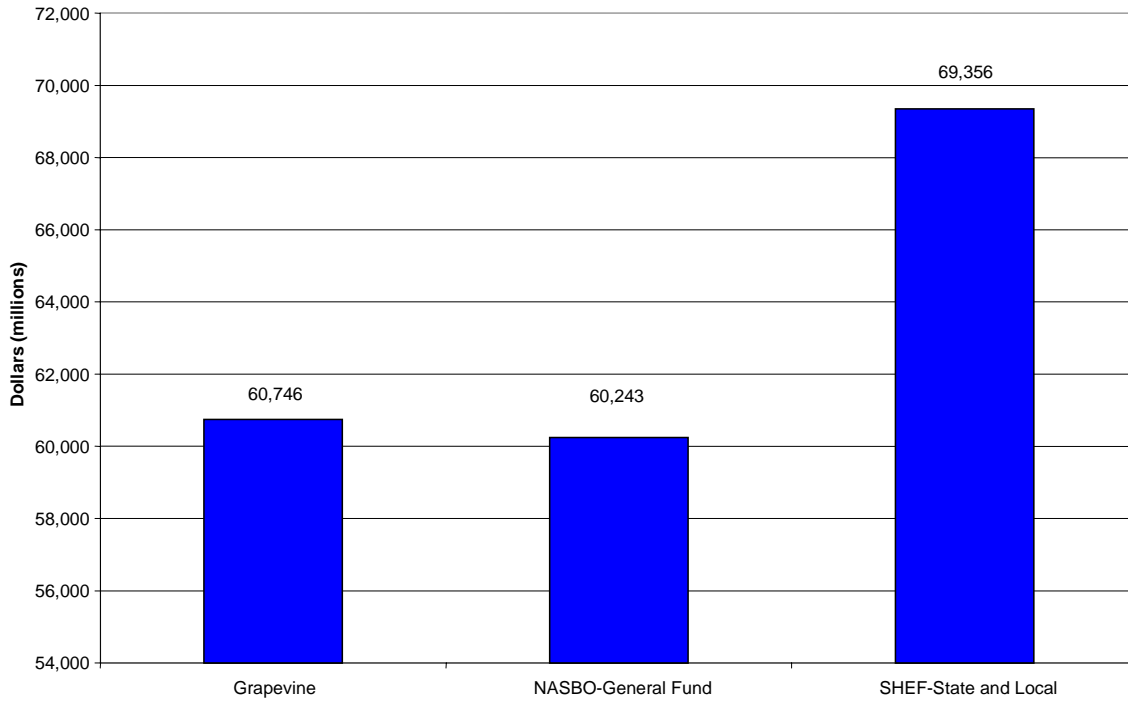
Analysis of State Higher Education Funding Measures

Policy analysts and researchers primarily rely on three² measures of state funding of higher education. These measures are the National Association of State Budget Officers (NASBO) *State Expenditure Reports*, the Grapevine *Annual Compilation of State Tax Appropriations for the General Operations of Higher Education*, and the State Higher Education Executive Officers *State Higher Education Finance* (SHEF) report. NASBO collects higher education expenditure data as part of its annual state Expenditure Report. The Expenditure Report includes state spending on all major state expenditure areas since 1986. Grapevine data is collected by The Center for the Study of Education Policy at the University of Illinois and reports data back to 1961. The State Higher Education Finance (SHEF) data is collected by State Higher Education Executive Officers (SHEEO). SHEF builds directly on a twenty-five year effort by Kent Halstead and reports data from 1980. How and what each organization reports will be considered in greater detail later. Analysts have also relied on Census data for state support of higher education and general state expenditures. However, recently NASBO, Grapevine, and SHEF have become more popular. Census data is still commonly used for total state expenditures and these data will be discussed later.

Figure 1 displays the differences between the various organizations' data for 2004. As is obvious, significant difference exists between what each measure is reporting in regard to state support for higher education. This is especially true in the case of the SHEF data. It is also important to look at the measures over time in order to assess how the differences in the organizations' data reflect changes in state higher education support. These data are displayed graphically in Figure 2 (see Appendix A for the actual numbers over time and a comparative data analysis).

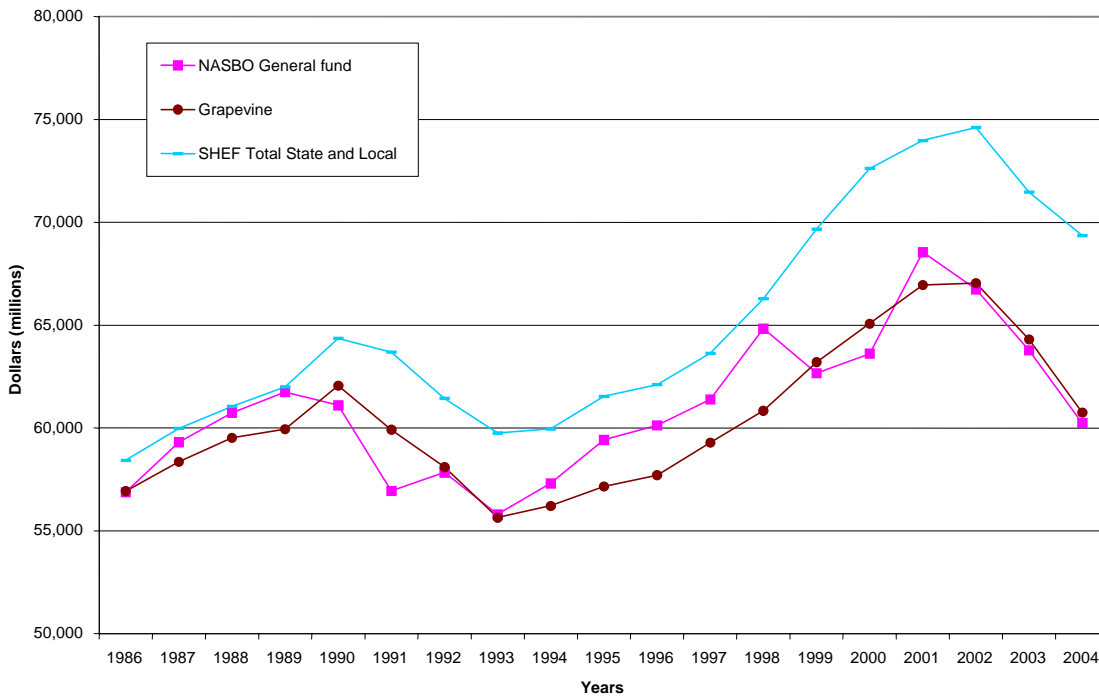
² Another accessible data source for state funding of higher education is the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Education Statistics. For institutional comparisons the IPEDS data source has much utility as you can pull out capital funds, financial aid, and other line items. However because of reliability concerns and the sheer effort required to make cross state comparisons these data are seldom used as a measure of state funding of higher education in national or other large scale studies. Therefore, the IPEDS data is left out of this analysis.

Figure 1: 2004 Funding of Higher Education Source Comparison



Data Sources: SHEEO-SHEF, NASBO, & Grapevine; Adjusted by HECA

Figure 2: Higher Education Funding Measures (U.S.)



Data Sources: SHEEO-SHEF, NASBO, & Grapevine; Adjusted by HECA

While NASBO's higher education general fund expenditures and Grapevine's higher education appropriations track fairly well along the same level, all three measures report fairly similar trends (the slopes are fairly similar), although the SHEF data displays a slightly steeper slope. This is indicative of the differences in the data collected and of a national trend, which is only captured by the SHEF data.

As indicated before, the differences are the result of which data the various organizations are collecting and the accuracy of the reporting (see Table 1).

Comparison of Data Collected

To begin with, it is important to understand the difference between appropriations and expenditures. Appropriations include the money that the state governments have set aside for higher education. Grapevine and SHEF both collect data on appropriations. Expenditures, which NASBO attempts to collect data on, includes the money that was actually spent on higher education. The amounts can and do vary.

Beyond whether the organizations are collecting data on appropriations or expenditures other differences exist. This section discusses each measure in detail, examining exactly what each is attempting to measure and the data each collects (also see Table 1).

Grapevine – "State Effort"

Grapevine reports on total "state effort" for higher education, defined as appropriations from tax funds for universities, colleges, community colleges, and state higher education agencies. Grapevine requests that states follow three guidelines in reporting:

1. Report only appropriations, not actual expenditures.
2. Report only sums appropriated for annual operating expenses.
3. For state tax appropriations in complex universities, separate the sums appropriated for (or allocated to) the main campus, branch campuses, and medical centers (even if on the main campus). Medical center data should include the operations of colleges of medicine, dentistry, pharmacy and nursing, and teaching hospitals, either lumped as one sum or set out separately as preferred.

"State effort" for Grapevine includes:

- Sums appropriated for state aid to local public community colleges, state-supported community colleges, and vocational-technical two-year colleges or institutes predominately for high school graduates and adult students.
- Local tax support for higher education.
- Sums appropriated for statewide coordinating or governing boards (for expenses and/or for allocation to other institutions).
- Sums appropriated for state scholarships or other student financial aid.
- Sums destined for higher education but appropriated to another state agency.
- Appropriations directed to independent institutions of higher education.

Excluded items include appropriations for capital outlays and debt service, and appropriations of sums derived from federal sources, student fees, auxiliary enterprises, and other non-tax sources.

National Association of State Budget Officers (NASBO) – "State Funds"

NASBO defines state support of higher education as expenditures reflecting support of state university systems, law medical veterinary, community colleges, private colleges and universities, and vocational education. "State Funds" are defined as general funds plus other state funds.

Fund revenue sources include:

- Sales Tax.
- Gaming Tax.
- Corporate Income Tax.
- Personal Income Tax.
- Other taxes and fees (depending on the state, these may include cigarette and tobacco taxes, alcoholic beverage taxes, insurance premiums, severance taxes, licenses and fees for permits, inheritance taxes, and charges for state-provided services).
- Tuition and Fees and student loan programs (in most states).

States are also requested to include capital spending (for some states this can be substantial, and it tends to vary widely from year to year). Exclusions include federal research grants and university endowments and revenue from non-tax sources.

NASBO breaks the data down into three categories including state higher education general fund expenditures, other fund expenditures, and bond expenditures. The majority of higher education's funding comes from the state general fund (around 50%). Revenues for the general fund are generally received from broad-based state taxes and are appropriated on fairly regular cycles. Other state funds are expenditures from revenue sources, which are restricted by law for particular functions or activities (like tuition and fees). Bonds are expenditures from the sale of bonds, generally for capital projects. Total state higher education expenditures is the combination of all three categories. The most relevant category is General Funds, which is covered here.

NASBO asks states for lump sum amounts for each of their categories (General Fund, Other State Funds, and Bond Funds). They do not break the data down any further than that. NASBO only deals with aggregate level data. Therefore, NASBO is not able to accurately report what is included in each category by individual states beyond what is reported above. This is reflective of NASBO's purpose in publishing the Expenditure Reports, which is to give states a general understanding of state funding of various major state expenditure areas.

States vary in what they actually report. Some states include tuition and fees while others do not -- just like some include aid to private higher education and others do not. NASBO argues that while their data may be problematic for cross-state comparisons, it should be consistent over time. However, as Appendix A shows, there is some variance among individual states over time in what they exclude from their report. The items included in the tables generally fall into the Other State Funds category, although not entirely as funding for private higher education is frequently appropriated out of states' general funds. This variance in reporting practices may explain why there is more year-to-year variance in the NASBO General Fund data than there is in either the Grapevine or SHEF data. It also makes cross-state comparisons impossible and cross-state, cross-measurement comparisons difficult with NASBO data.

SHEEO-SHEF – "Total State Support"

The SHEEO survey requires the state's Grapevine appropriation number along with the following data elements:

- Funding under state auspices for appropriated non-tax state support (monies from lotteries set aside for institutional support or for student assistance).
- Local tax support for higher education.
- Funding under state auspices for non-appropriated state support (monies from receipt of lease income and oil/mineral extraction fees on land set aside for public institution benefit).
- Interest or earnings received from state-funded endowments set aside for public sector institutions.
- Portions of multi-year appropriations from previous years.

SHEEO-SHEF breaks the data down in three ways – Total State and Local Support, Educational Appropriations, and Total Educational Revenues. Total State and Local Support includes all funding for

higher education, including tuition. Educational Appropriations includes state and local appropriations minus appropriations for research centers and institutes, agricultural experiment stations and cooperative extension, teaching hospitals, medical schools, and private higher education. Total Educational Revenues is defined as educational appropriations plus net tuition revenue, which explains why it is significantly higher than the other measures.

Table 1: Characteristics of Measures of State Higher Education Funding

	Grapevine	SHEF Total State and Local Support	NASBO General Fund
Time frame	Beginning-of-year to beginning-of-year; Immediate year appropriations; (how) are mid-year cuts handled?	End-of-year to end-of-year; captures mid-year cuts or supplemental appropriations; Dollars appropriated for expenditure in the just-completed year	Expenditures for state fiscal year (July 1 to June 30)
Endowment income	No	Yes	No
Med/Health	Yes	Yes	Yes
Central gov or coord boards	Yes	Instructions say to leave them out, but the survey doesn't provide a line to subtract them	?
Tuition	No	No	No
Student Loan Programs	No	No	Yes
Financial Aid	Yes	Yes	?
Capital Funding	No	No	No
Private Higher Education	Yes	Yes (delaminated only after 1999)	Yes
Sector Data	Yes	No	No
Years included	1961 to current	1980 to current	1986 to current
Person / Organization Responsible	State higher education finance officer (in most cases)	State higher education finance officer	Chief state budget officers
Appropriations	State & local tax support	Grapevine, plus non-tax support (lottery) and tax non-appropriated support (oil & mineral fees, tobacco settlements)	Expenditures. State and local tax and fee support

Consistent Trends in State Support

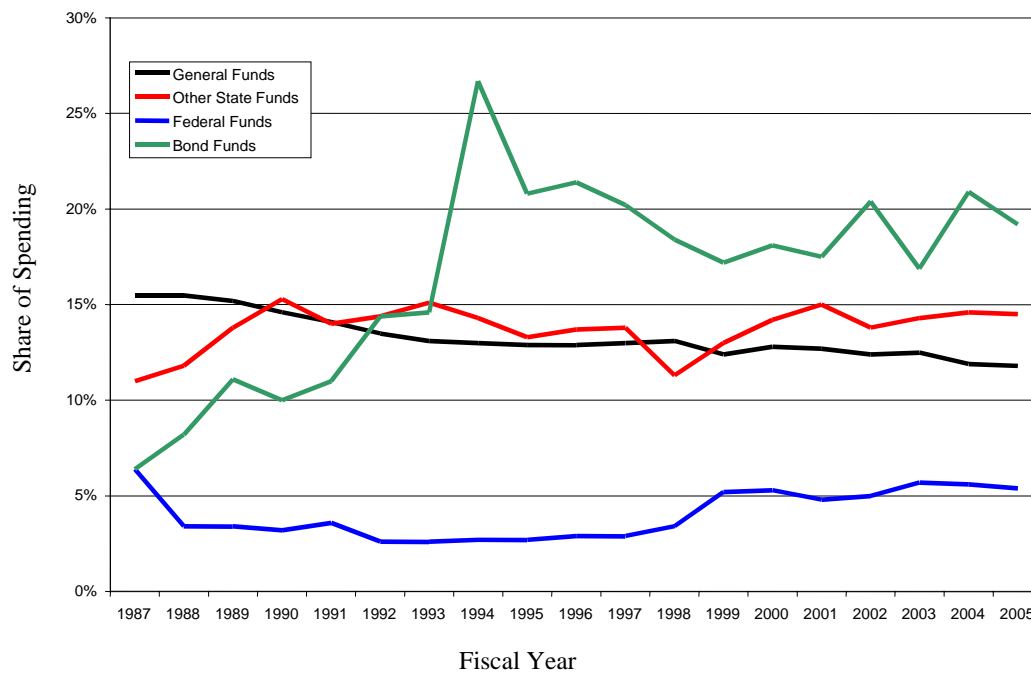
Despite the differences in the data, the same general trend is reported by each measure (see Figure 1). There is a steady increase in state support from 1986 to 1990, followed by a decline from 1990 to 1994. State support then increases until 2002 when it again decreases. Again, the fluctuations in the NASBO data are most likely caused by inconsistent data reporting, which threatens and limits the reliability and validity of the data. The SHEF data reports the largest increase from 1986 to 2004 (19% compared to 6% for NASBO and 7% for Grapevine). Not only is the line steeper for the SHEF data but also the periodic declines in state support are less

severe. This is all caused by the inclusion of non-tax support (e.g., lottery support) and non-appropriated support (e.g., oil and mineral fees, tobacco settlements). It appears that states are increasingly relying on alternative ways of financing higher education. This phenomenon is entirely missed in the Grapevine and NASBO data.

Higher Education's Share of the State Budget

One common way of analyzing state commitment to higher education is by considering it as a percentage of the state general fund. However, various sources present substantial differences (Figure 3, 4 and 5). Figure 3 uses data from National Association of State Budget Officers (NASBO) for both spending on higher education and general fund spending. Figures 4 and 5 use data from Grapevine for higher education appropriations and Census Bureau data for general fund expenditures; however, the data on higher education appropriations is adjusted differently in each case. It is important to understand that higher education in total gets close to fifty percent of its state funding from state general funds (the other state sources being: other state funds 33%, federal funds 15%, and bonds 5%), so while there may be greater change in the other areas (such as bond funds), the changes do not have as significant an affect as do changes in the general fund expenditures (NASBO, 2004).

Figure 3: Higher Education's Share of State Spending by Fund Source

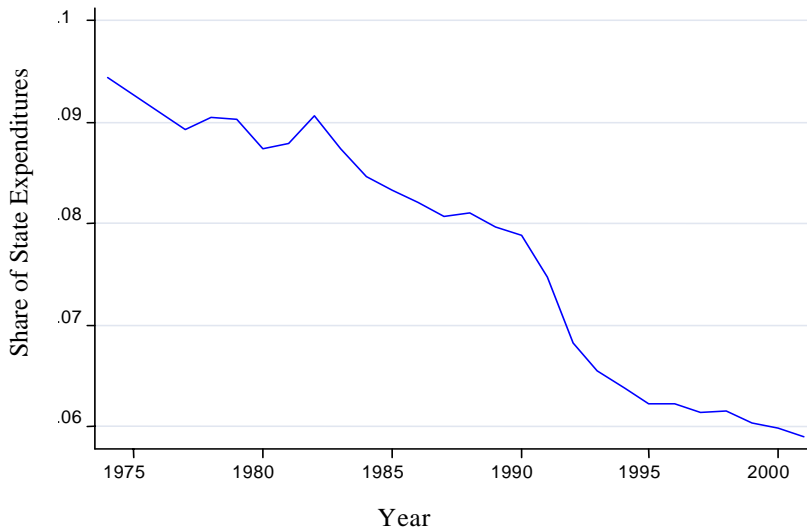


Source: National Association of State Budget Officers
Taken From: SHEEO

Data

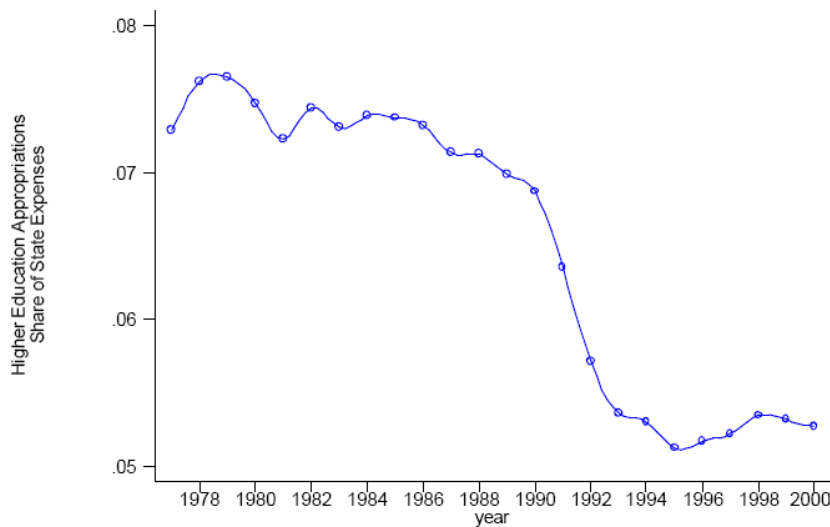
Based on Figure 3 it appears that higher education's share of general fund expenditures has remained fairly constant with only a slight decrease. This is not the case for Figures 4 and 5 below.

Figure 4: Grapevine (minus funding for private higher education) and Census Bureau Data (Statistical Abstracts)
Higher Education's Share of State General Fund Expenditures (U.S.)



Data Source: Grapevine; U.S. Bureau of the Census, *Statistical Abstract of the United States*
Taken From: Tandberg, D. A. (2006). *The Politics of State Higher Education Funding*. Unpublished Master's Paper. p. 4.

Figure 5: Grapevine and Census/Department of Commerce Data
Higher Education's Share of State General Fund Expenditures (U.S.)

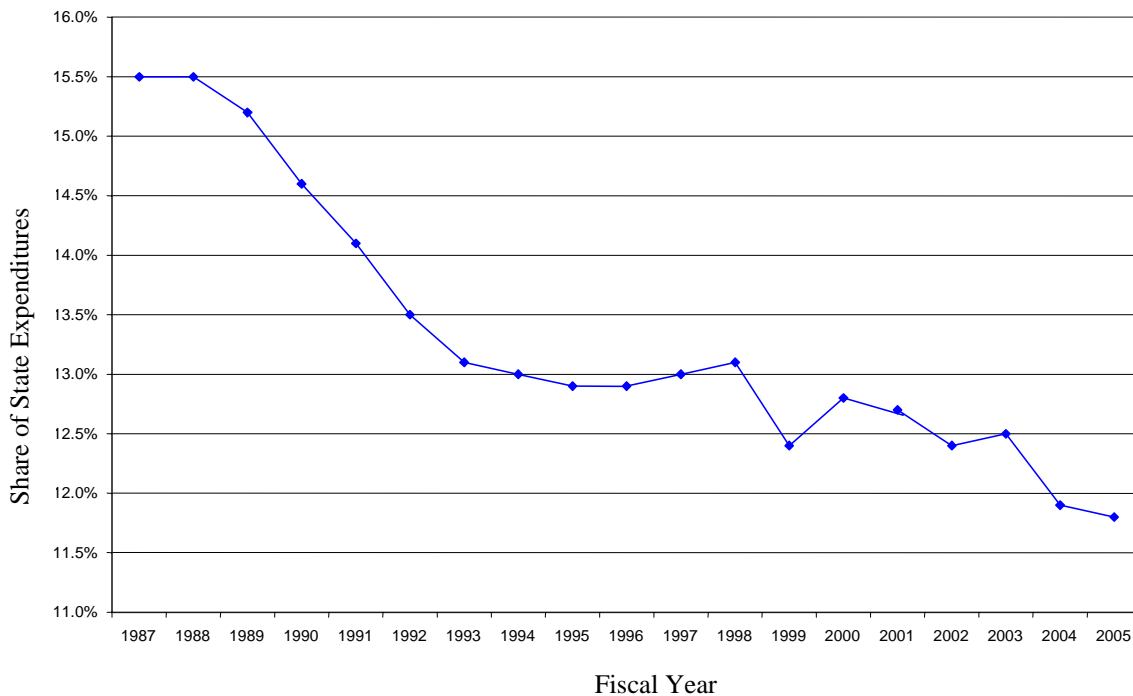


Data Source: Grapevine; Bureau of the Census, Department of Commerce
Taken From: Kane, T. J., Orszag, P. R., & Gunter, D. L. (2003). State fiscal constraints and higher education spending: The role of Medicaid and the business cycle. Discussion Paper No. 11, D.C.: The Urban Institute. P. 31.

As can be seen, Figures 4 and 5 paint very different pictures than Figure 3. Based on these figures it appears that higher education has undergone a drastic decrease in the share of general funds appropriated to it.

However, when comparing the graphs it is important to pay attention to the scale and the actual values. If we remove the other state funding sources (other state funds, federal funds, and bond funds) from Figure 1 and reduce the scale to one that is more comparable to Figures 4 and 5, the data looks much more similar (see Figure 6). While differences remain in the size of the decline, the story is similar. The higher education's share of state general fund expenditures begins its rapid decline in roughly the same year (1990) and the decline ends in the same year (1995). Most importantly, the slope of the line in each case is fairly comparable.

Figure 6: Higher Education's Share of General Fund Expenditures Comparable Scale (U.S.)



Data Source: National Association of State Budget Officers

Based on Figure 6, from close to 1990 to 1995 (peak to valley for each graph) higher education funding as a percent of state general fund expenditures dropped by 1.7 percentage points, a -17% change. Based on Figure 4, it experienced a -22% change and Figure 5, a -26% change. Although the percentages are not exactly the same, the remaining differences may be explained by the differences in the data.

The questions that remain are how significant is the change, and why and how did it happen?

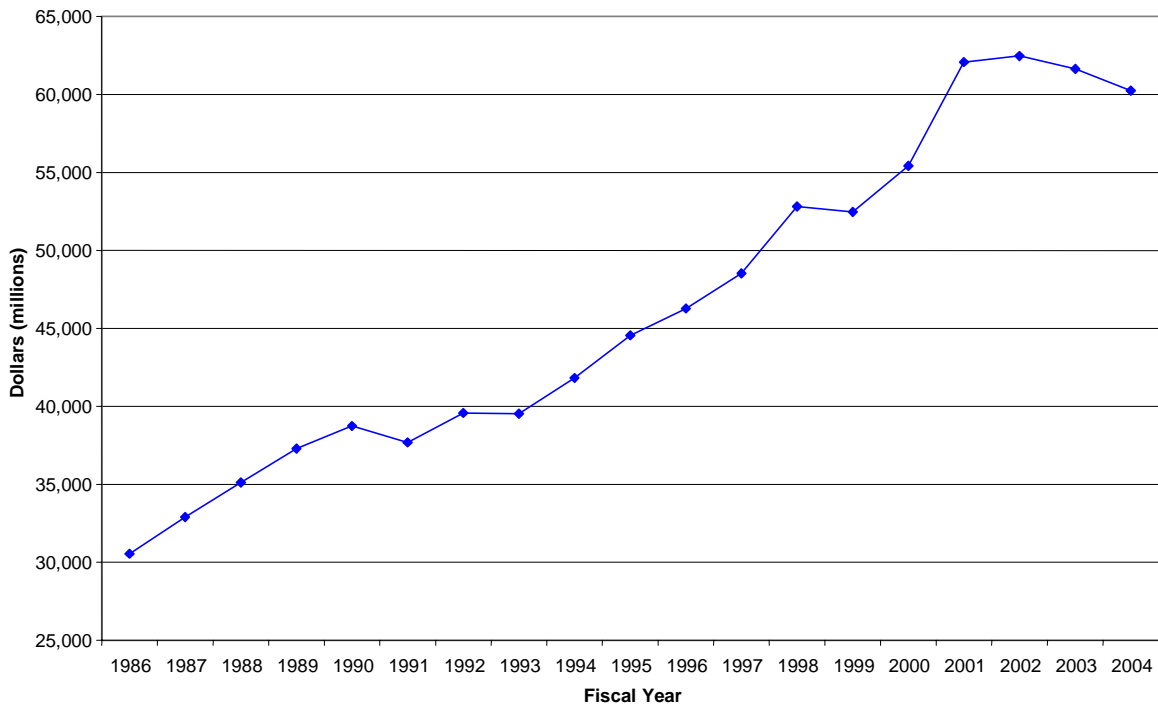
Higher education general fund expenditures were fairly flat from 1990-1993, again from 1998-1999, and 2001-2004 (NASBO). Overall, as Figure 7 indicates, national higher education expenditures have grown over the last 25 years, despite the fluctuations (Figure 7 reports

nominal data because these data were also used in the calculations for Figure 6; see Figure 2 for HECA adjusted data).

Looking at the total state general fund expenditures explains the steep decline in the percentage of expenditures devoted to higher education. During this time total state expenditures have greatly increased (see Figure 8, again nominal dollars) as higher education's share has remained well below its 1990 level and higher education appropriations have fluctuated (several plateaus and slowdowns), yet increased overall.

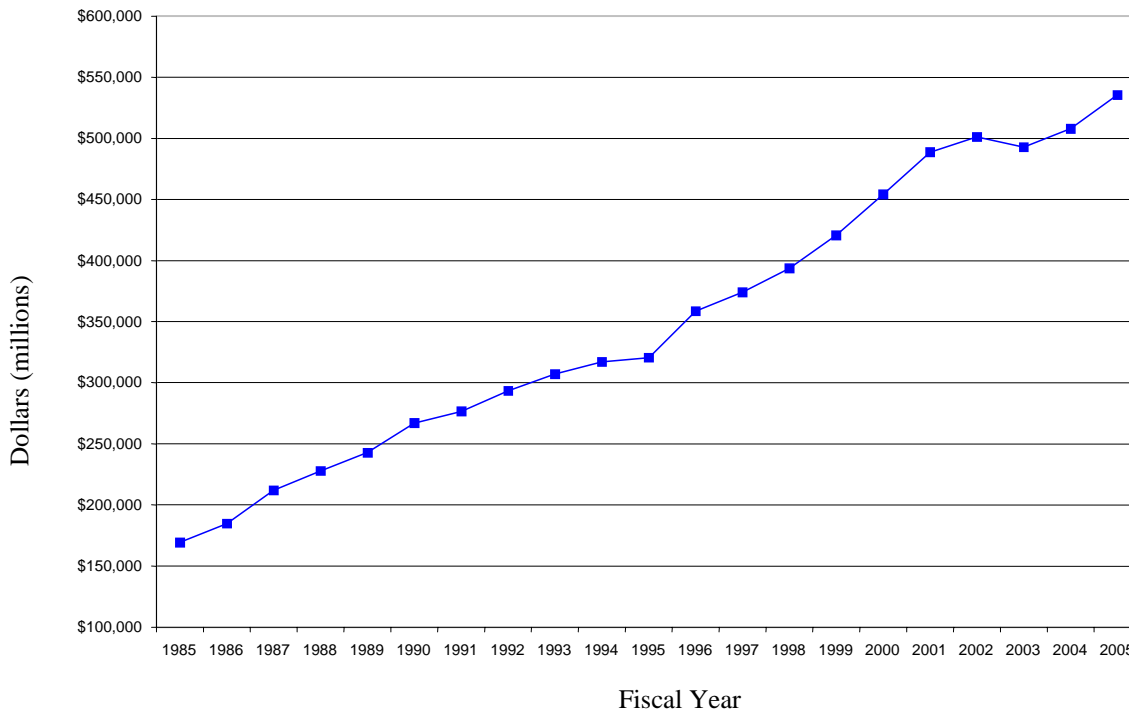
State general fund expenditures increased during the times when higher education expenditures were in plateau. General fund expenditures experienced a change of 74% (adjusted CPI-U 2004) from 1985-2004, while higher education expenditures increased by 5.9% from 1986-2004 using HECA (see Figure 7), or 15.4% using CPI-U over the same time period, in both cases using NASBO data. Increases in non-discretionary general fund expenditures help explain the declining share of higher education's proportion of state budgets. Other state priorities have required increasing amounts of state dollars and, in some of these areas, states are required by law to fully support or are case-load driven (e.g., Medicaid and K-12 education), therefore leaving states few options but to increase state spending in those areas.

Figure 7: Higher Education General Fund Expenditures (current U.S. Dollars)



Data Source: NASBO

Figure 8: Total General Fund Expenditures (current U.S. dollars)



Data Source: NASBO

In order to fully understand the changes in higher education’s share of the state budget it is important to remember the differences in the measures of higher education funding, and also to consider the other side of the equation which is measures of state expenditures.

The two most common measures, and the ones used here, are the Census Bureau and NASBO. The most commonly used Census measure of state expenditures in higher education studies is called State Direct General Expenditures. In this measure the Census Bureau includes capital expenditures and what they call “other direct general expenditures,” which make up the majority of the expenditures in the category. The Census Bureau does not provide any additional explanation of what specifically is included within those categories.

NASBO breaks their expenditure data into General Fund, Federal Funds, Other State Funds, Bonds, and Total Expenditures. The General Funds category is the predominant fund for financing a state’s operations. Revenues for this fund are received from broad-based state taxes. The Federal Funds category includes funds that are received directly from the federal government. The Other Funds category includes expenditures from revenue sources that are restricted by law for particular governmental functions or activities. The Bonds category includes expenditures from the sale of bonds, which are generally for capital projects. Total Expenditures is the combination of the other categories.

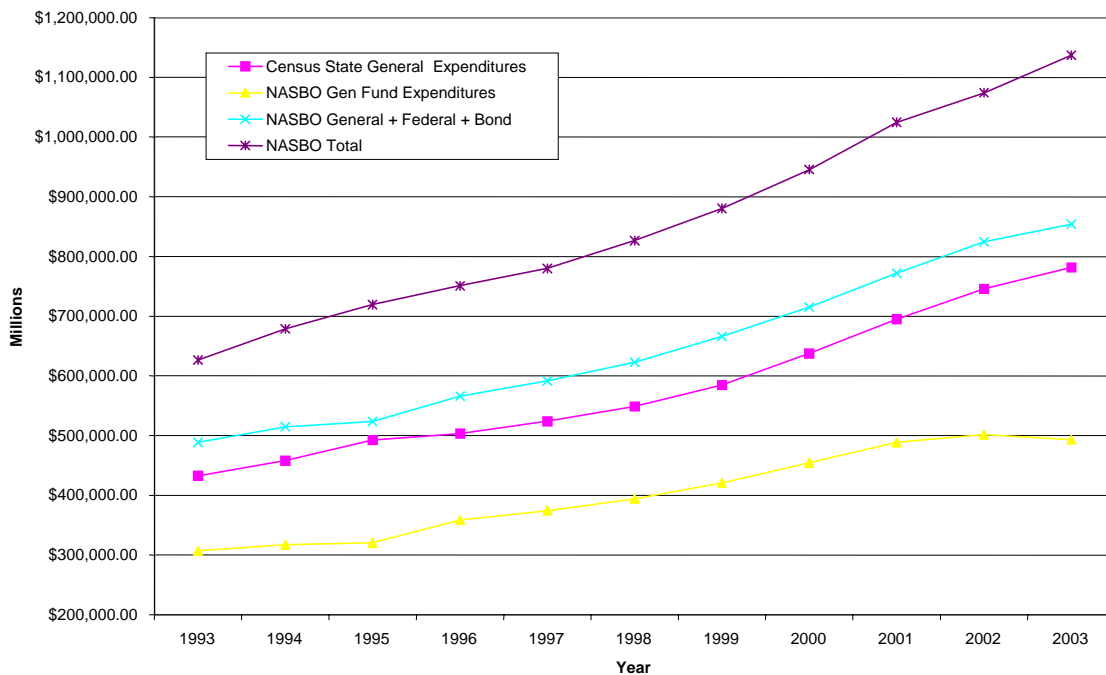
The federal government provides significant aid to state governments through upfront payments, such as those for highways or transportation, and reimbursements, such as those for Medicaid. Under the State Direct General Expenditures category the Census does not provide a separate

category for Federal funds, therefore, it is impossible to pull out the true amount of state expenditures in that category. As a result, the Census data inflate the amount of state expenditures in that category.

Data Comparison

In order to understand the differences between the data sources, the actual data was analyzed. Because the Census data contains both capital expenditures and does not account for federal dollars both the NASBO General Fund category--a combination of general, Federal, and bond funds--and the Total Funds categories were compared to the Census State Direct General Expenditures category (see Figure 9; also see Appendix C for the actual data and analysis). As could be expected the NASBO general plus Federal and bond funds most closely resembled the Census data.

Figure 9: State Expenditure Sources (current U.S. dollars)



The structural difference between the Census General Fund and the NASBO General Fund categories explains much of the difference in level between Figures 4 and 5, which report similar percentages, and Figure 6, which reports much large percentages. Since the Census general fund expenditures category does not subtract federal reimbursements and includes capital expenditures, the dollar amounts are much greater than what is reported by the NASBO general fund category. Another concern to be aware of is that none of the measures of state higher education support analyzed here includes state capital spending, whereas capital is included in the Census data.

NASBO data is useful because it separates the actual state general fund expenditures from Federal and capital expenditures; however the same concerns about reliability and validity exist with these data that exist with the NASBO state higher education expenditure data. But, if the

goal is to get a general idea of higher education's share of general fund expenditures, then using the NASBO data on both sides of the equation may be the most accurate, while being aware of the limitations of the data.

Conclusion

The most important finding from this study is that each measure of state funding for higher education tends to tell a similar story, at least regarding general trends. Regardless of the measure employed, higher education funding has increased over the last eighteen years, despite significant decreases in the early 1990s and 2000s, and despite the fact that higher education makes up a significantly smaller portion of the state budget. This is especially true when focusing on the SHEF data, as states are increasingly relying on non-traditional forms of higher education finance such as non-tax and non-appropriated aid. Likewise, states are increasingly allowing institutions to raise tuition.

The NASBO data tends to be the least reliable because of its greater year-to-year variance and is less useful for higher education researchers and policy analysts because it does not break the data down into sectors and other higher education categories. Again, the Expenditure Reports were never meant to give such detailed data. The NASBO data also covers the shortest time period. However, the NASBO data does capture the general trend in state support of higher education reported by the other measures fairly well. Because NASBO reports expenditures rather than appropriations and/or other sources of revenue these data are the most appropriate for questions that compare appropriations versus expenditures and those regarding actual uses of funding, important questions for organizational behavioralists, who believe that one can identify organizational priorities by looking at the ways in which moneys are used.

The Grapevine data is more reliable, it has existed for the longest time, and you can get sector and institutional level data, which are all positives. It is obviously the appropriate dataset for analyses that span more than 25 years. However, for some states the Grapevine data does not accurately report all state support of higher education, such as what comes from non-tax and non-appropriated sources.

The SHEF data take the most into account, such as non-tax and non-appropriated sources of state revenue, which makes a significant difference in states such as Wyoming and New Mexico and in the national data. As indicated earlier, these forms of revenue are playing an increasingly important role in the financing of higher education. As a result, the SHEF dataset is superior for current analyses of total state effort. Further, because SHEF breaks the data down in Educational Appropriations, Total Educational Revenue, and Total State and Local Support, researchers, policy analysts, and policy makers are able to accurately account for the various ways states support higher education.

None of the datasets reviewed here, report capital outlays. This is not a problem for longitudinal analyses of current funds revenues, but is a constraint if the analyst is interested in viewing total educational revenues. For example, capital outlays to higher education in Colorado changed from \$200M in 2003 to \$2.5M in 2005. This is a huge difference, one that greatly impacted increases in student fees in particular.

When analyzing higher education's share of the state budget it is important to be aware of not only how state support of higher education is measured, but also how general state expenditures are measured. It appears clear that the Census numbers are inflated because they do not account for federal reimbursements. Also, because most measures of state support of higher education do not include capital, it is problematic to use them in conjunction with the Census data without subtracting capital from the Census data. However, despite the measures employed, higher education's share of states' budgets is much smaller now than it was 16 years ago as other state demands have increased more rapidly and states use alternative means to support higher education.

Because NASBO breaks the data into various categories researchers able to analyze comparable data for both general fund expenditures for higher education and total general fund expenditures and account for federal reimbursements. Likewise, because the data comes from single source (as opposed to using data from Grapevine and the Census, for example) researchers can be surer of data reliability. Therefore, NASBO may be the superior source for analyzing higher education's share of general fund expenditures.

Finally, it is important that policy analysts and researchers understand what is contained in the data they use and the limitations of the data. This way, while some of the data may not be improvable, a more accurate story can be told by recognizing what is measured and accounting for the limitations of the data.

Appendix A

Data Comparison of Measures of State Support of Higher Education

Year	NASBO General Fund		SHEF Total State and Local	Ratio	Ratio	Ratio
	Fund	Grapevine		NASBO / SHEF State & Local	Grapevine / SHEF State & Local	NASBO / Grapevine
1986	\$30,536.00	\$30,561.00	\$31,370.90	0.9734	0.9742	0.9992
1987	\$32,900.00	\$32,367.00	\$33,269.70	0.9889	0.9729	1.0165
1988	\$35,108.00	\$34,408.00	\$35,291.40	0.9948	0.9750	1.0203
1989	\$37,296.00	\$36,216.00	\$37,452.40	0.9958	0.9670	1.0298
1990	\$38,729.00	\$39,338.00	\$40,796.90	0.9493	0.9642	0.9845
1991	\$37,677.00	\$39,644.00	\$42,140.73	0.8941	0.9408	0.9504
1992	\$39,567.00	\$39,748.00	\$42,032.37	0.9413	0.9457	0.9954
1993	\$39,521.00	\$39,407.00	\$42,325.30	0.9337	0.9311	1.0029
1994	\$41,812.00	\$41,021.00	\$43,750.45	0.9557	0.9376	1.0193
1995	\$44,555.00	\$42,852.00	\$46,135.73	0.9657	0.9288	1.0397
1996	\$46,279.00	\$44,407.00	\$47,798.56	0.9682	0.9290	1.0422
1997	\$48,532.00	\$46,868.00	\$50,307.92	0.9647	0.9316	1.0355
1998	\$52,811.00	\$49,560.00	\$54,006.96	0.9779	0.9177	1.0656
1999	\$52,470.00	\$52,921.00	\$58,339.82	0.8994	0.9071	0.9915
2000	\$55,412.00	\$56,682.00	\$63,247.98	0.8761	0.8962	0.9776
2001	\$62,079.00	\$60,636.00	\$67,001.12	0.9265	0.9050	1.0238
2002	\$62,464.00	\$62,746.00	\$69,820.03	0.8946	0.8987	0.9955
2003	\$61,638.00	\$62,156.00	\$69,070.72	0.8924	0.8999	0.9917
2004	\$60,243.00	\$60,746.00	\$69,355.96	0.8686	0.8759	0.9917
Percent Change	0.9729	0.9877	1.2108	-0.1076	-0.1009	-0.0075
			Mean	0.9401	0.9315	1.0091
Current U.S. Dollars			Standard Deviation	0.0415	0.0298	0.0272
			Mean's Distance From 1	0.0599	0.0685	0.0091

Appendix B

Items Excluded From NASBO Data

NASBO Items Excluded 2004	Employer Contribution to Pensions	Employer Contributions to health plan	Tuition and fees	Student Loan Programs	University Research Grants	Vocational Education	Assistance to Private Hi Ed
Alabama							
Alaska					X	X	X
Arizona							X
Arkansas					P		X
California			X				
Colorado				X	X		P
Connecticut	X	X				X	
Delaware			X	X	X	X	X
Florida							
Georgia							
Hawaii	P	P		X	X	X	
Idaho				X	X		X
Illinois		P	P	P	P	P	P
Indiana	P	P	X		X		X
Iowa							
Kansas							
Kentucky						P	
Louisiana					X		
Maine	P	P	X	P			X
Maryland							
Massachusetts	X	X	P				
Michigan	X	X	X	X	P		
Minnesota		X			P	P	P
Mississippi							X
Missouri	X	X	X		X	X	
Montana				X	X		
Nebraska					X		
Nevada				X	X		N/A
New Hampshire	P	P	P	P	X		X
New Jersey					X	X	
New Mexico							X
New York					X	X	
North Carolina					X		
North Dakota						X	X
Ohio			X	P	P	X	
Oklahoma							X
Oregon							
Pennsylvania	X	X		P	X	P	
Rhode Island				P		P	X
South Carolina				X			

A comparison of measures of state higher education funding

South Dakota								X
Tennessee					X			
Texas			P		P	P		
Utah					X			X
Vermont	X	X	X	X	X	X		
Virginia				X				
Washington								X
West Virginia				X	P	P		
Wisconsin								
Wyoming								X
ALL STATES	10	12	12	17	26	17		22

X = Excluded item; P = Partially excluded item

NASBO Items Excluded 2000	Employer Contribution to Pensions	Employer Contributions to Health Plans	Tuition and Fees	Student Loan Programs	University Research Grants	Vocational Education	Assistance to Private Hi Ed
Alabama							
Alaska						X	X
Arizona							P
Arkansas							X
California					X		
Colorado					X		
Connecticut	P	P			X		
Delaware			P	P			X
Florida	P	P			P	P	
Georgia							
Hawaii					X		X
Idaho				X	X		X
Illinois		P	P		X		
Indiana			X		X	X	X
Iowa							
Kansas							P
Kentucky						P	
Louisiana					X		
Maine	P	X	X	P			X
Maryland				X		X	
Massachusetts	X	X	P	X	X	X	X
Michigan	X	X	X	X	P	X	
Minnesota				X			
Mississippi							X
Missouri	X	X	X		X	X	
Montana				P	X		X
Nebraska					X		
Nevada			P	P	X	P	X
New Hampshire	P	P	P	P	X		X
New Jersey					X	X	
New Mexico							X
New York					X	X	

A comparison of measures of state higher education funding

North Carolina					X		
North Dakota				P	X	X	
Ohio			X	P	P	X	
Oklahoma							X
Oregon					X		
Pennsylvania	X	X	X		X		
Rhode Island					P	X	P
South Carolina				X			
South Dakota						X	X
Tennessee					X		
Texas	X	P		P			
Utah					X		X
Vermont	X	X			X	X	X
Virginia				X			
Washington							
West Virginia				X	P	P	
Wisconsin							
Wyoming				X	X		X
ALL STATES	10	11	11	17	29	17	21

X = Excluded item; P = Partially excluded item

Appendix C

Data Comparison of Measures of State Expenditures

Year	Census State General Expenditures	NASBO General Fund Expenditures	NASBO General + Federal + Bond	NASBO Total (includes other)	Ratio NASBO General / Census State	Ratio NASBO (G+F+B) / Census State	Ratio NASBO Total / Census State
1993	\$432,813.00	\$307,018.00	\$488,306.00	\$626,423.00	0.7094	1.1282	1.4473
1994	\$457,880.00	\$317,022.00	\$514,366.00	\$678,960.00	0.6924	1.123	1.4828
1995	\$492,525.00	\$320,550.00	\$523,700.00	\$719,357.00	0.6508	1.0632	1.4605
1996	\$503,305.00	\$358,664.00	\$565,975.00	\$750,733.00	0.7126	1.1245	1.4916
1997	\$523,832.00	\$374,099.00	\$591,110.00	\$780,144.00	0.7142	1.1284	1.4893
1998	\$548,800.00	\$393,736.00	\$622,725.00	\$826,714.00	0.7174	1.1347	1.5064
1999	\$584,542.00	\$420,785.00	\$665,950.00	\$880,252.00	0.7199	1.1393	1.5059
2000	\$637,653.00	\$454,198.00	\$715,402.00	\$945,271.00	0.7123	1.1219	1.4824
2001	\$694,969.00	\$488,613.00	\$772,050.00	\$1,024,439.00	0.7031	1.1109	1.4741
2002	\$745,822.00	\$501,260.00	\$824,498.00	\$1,073,816.00	0.6721	1.1055	1.4398
2003	\$781,772.00	\$492,994.00	\$854,209.00	\$1,136,694.00	0.6306	1.0927	1.4540
Percent Change	0.8063	0.6057	0.7493	0.8146	-0.1110	-0.0315	0.0046
				Mean	0.6941	1.1157	1.4758
				Standard Deviation	0.0300	0.0219	0.0228
				Mean's Distance From 1	0.3059	0.1157	0.4758
Current U.S. dollars							